



# Service Manual



## 2005 500 Series (569) Self Propelled Walk Behind Mower

**NOTE:** These materials are for use by trained technicians who are experienced in the service and repair of outdoor power equipment of the kind described in this publication, and are not intended for use by untrained or inexperienced individuals. These materials are intended to provide supplemental information to assist the trained technician. Untrained or inexperienced individuals should seek the assistance of an experienced and trained professional. Read, understand, and follow all instructions and use common sense when working on power equipment. This includes the contents of the product's Operators Manual, supplied with the equipment. No liability can be accepted for any inaccuracies or omission in this publication, although care has been taken to make it as complete and accurate as possible at the time of publication. However, due to the variety of outdoor power equipment and continuing product changes that occur over time, updates will be made to these instructions from time to time. Therefore, it may be necessary to obtain the latest materials before servicing or repairing a product. The company reserves the right to make changes at any time to this publication without prior notice and without incurring an obligation to make such changes to previously published versions. Instructions, photographs and illustrations used in this publication are for reference use only and may not depict actual model and component parts.

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## SERIES 569 SELF PROPELLED

### 1. INTRODUCTION

- 1.1. **Disclaimer:** This service manual was intended for the use, by trained technicians. The information contained in this manual is current and accurate at the time of writing, but is subject to change without notice.
- 1.2. **Description:** The 569 is a multi function front-wheel-drive self propelled lawn mower. This mower features 12" rear wheels and will bag, mulch, or side-discharge the grass using the included grass deflector. See Figure 1.2.



Figure 1.2

### 2. BELT REMOVAL

- 2.1. Disconnect and ground the spark plug wire.
- 2.2. Drain out any fuel that is in the fuel tank.
- 2.3. Remove the two hex head shoulder screws that secure the belt guard using a 1/4" driver. See Figure 2.3.



Figure 2.3

- 2.4. Squeeze the belt cover inward from both sides of the cover to release the lock tabs. See Figure 2.4.



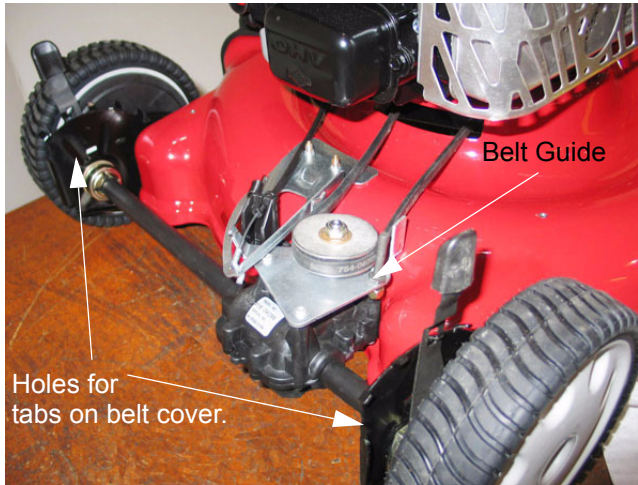
Figure 2.4

**NOTE:** Tabs on both sides of the cover that secure in each front wheel height adjuster.



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- 2.5. Loosen the belt guide with a pair of 7/16" wrenches. See Figure 2.5.

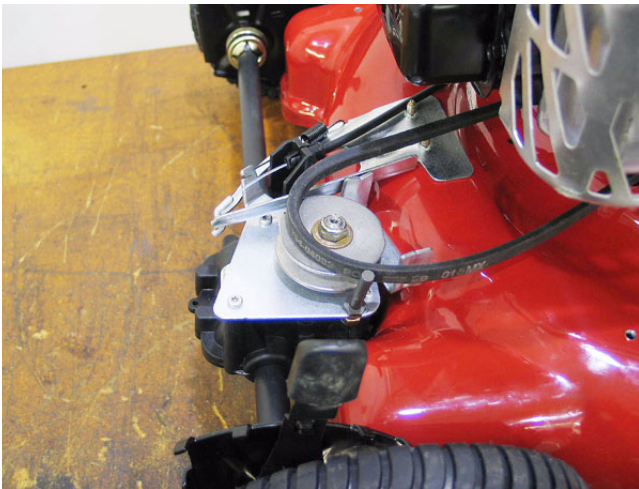


**Figure 2.5**

**NOTE:** The belt guide does not need to be removed simply loosen enough to allow the belt to clear the pulley.

**NOTE:** Notice the holes on each of the wheel brackets designed to stabilize the belt cover.

- 2.6. Slip the belt off of the transmission pulley. See Figure 2.6.

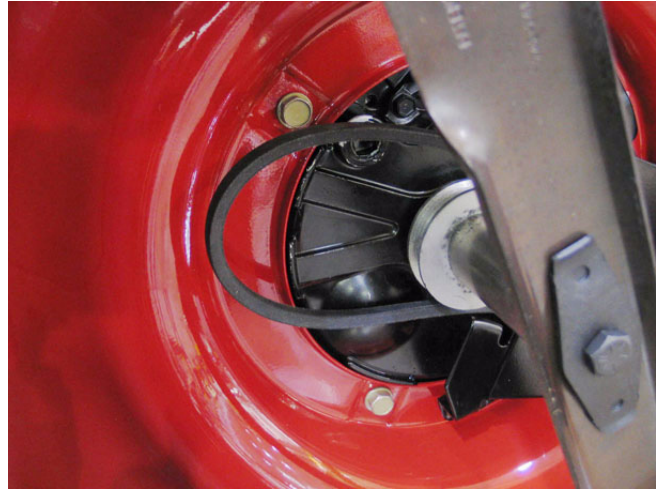


**Figure 2.6**

- 2.7. Position the mower on its left side to keep the air cleaner and carburetor elevated.

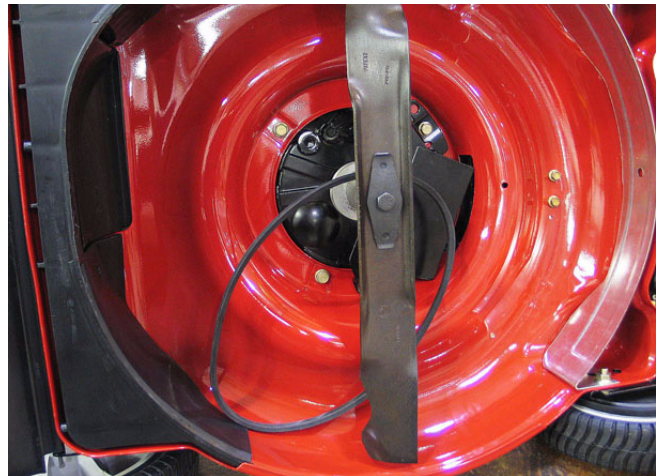
**NOTE:** Due to the orientation of the vent on the transmission positioning the mower on its left side is also advisable

- 2.8. Pull the belt in towards the rear of mower deck. See Figure 2.8.



**Figure 2.8**

- 2.9. Remove the old belt from the crank shaft this can be done with the blade still on the machine. See Figure 2.9.



**Figure 2.9**

**NOTE:** It may be necessary to spin the blade to allow the belt to fit between the blade tip and the deck.

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- 2.10. When installing the new belt be sure that the belt is riding within the belt keepers.  
See Figure 2.10.

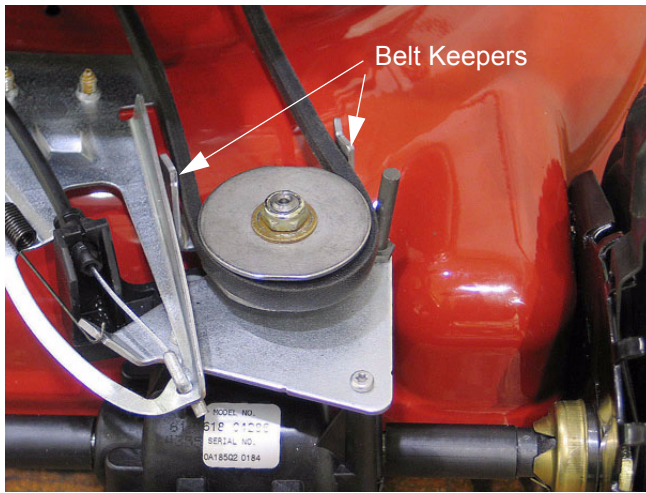


Figure 2.10

### 3. BLADE REMOVAL

- 3.1. Disconnect and ground the spark plug wire.
- 3.2. Drain the fuel tank or place a piece of plastic under the fuel cap to prevent gas from leaking.
- 3.3. Tip the mower on its side so the air cleaner is up.
- 3.4. Secure the blade from rotating with a block of wood or a blade lock.  
See Figure 3.4.



Figure 3.4

**NOTE:** Torque for crank shaft bolt is 450-600 inch pounds

### 4. TRACTION CONTROL CABLE REMOVAL

- 4.1. Disconnect and ground the spark plug wire.
- 4.2. Remove the belt cover.
- 4.3. Disconnect the Z-fitting from the cable to the stationary bracket. See Figure 4.3.

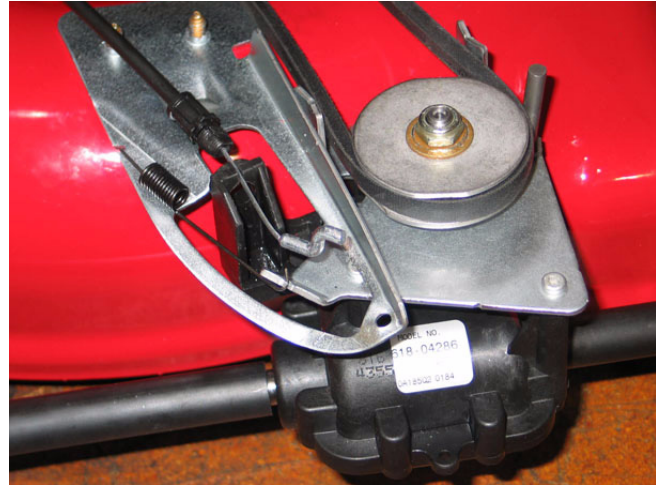


Figure 4.3

**NOTE:** Slight back pressure will give the cable slack to disconnect the Z-fitting easily.

**NOTE:** The cable end is barbed, and fits into a snap-in cable mount to hold the cable in place.

**NOTE:** A Ford fuel-line disconnect tool is handy for releasing barbed cable ends.

- 4.4. Squeeze the tabs together to allow the cable to slip through the bracket.
- 4.5. Cut the cable ties to remove them from the handle. Replace them with new ones during installation.
- 4.6. Loosen the wing nuts that secure the upper handle to the lower handle, and carefully fold the upper handle upward for easy access to the bottom of the self-propel control housing.

**NOTE:** Use caution not to kink the control cables.



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- 4.7. Remove the two Phillips head screws on the bottom of the control panel housing. See Figure 4.7.



Figure 4.7

- 4.8. Once the screws have been removed, take the cover off to expose the cable end of the handle. See Figure 4.8.



Figure 4.8

**NOTE:** Having the lever in a neutral position releases cable tension, easing cable removal.

- 4.9. Assemble mower by reversing the removal procedures.

## 5. ENGINE CONTROL CABLE

- 5.1. Push the bail handle to the forward limit of its travel to give the cable slack.
- 5.2. Disconnect the z-fitting from the bail handle.
- 5.3. Disconnect the z-fitting from the engine.

**NOTE:** The cable is held secure with a snap mount. Squeeze the tabs together to allow the cable to back out of the bracket. See Figure 5.3.

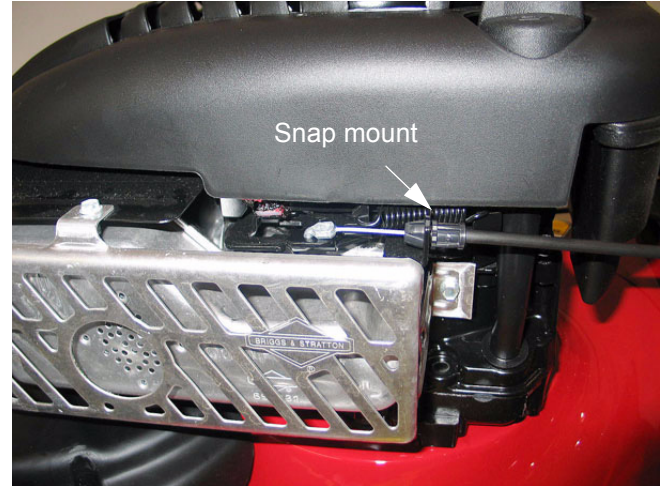


Figure 5.3

- 5.4. Snap the handle bar fitting off of the handle bar. The handle bar fitting is part of the control cable. See Figure 5.4.



Figure 5.4

- 5.5. Install cable by reversing the removal procedures.



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### 6. TRANSMISSION REMOVAL/REPLACEMENT

- 6.1. Remove the belt cover by removing the shoulder screws, squeeze the housing together to clear the tabs that go into the wheel bracket.
- 6.2. Loosen the belt guide and take the belt off of the transmission pulley.
- 6.3. Disconnect the drive cable from the cable mounting bracket and transmission.
- 6.4. Disconnect the return spring. See Figure 6.4.

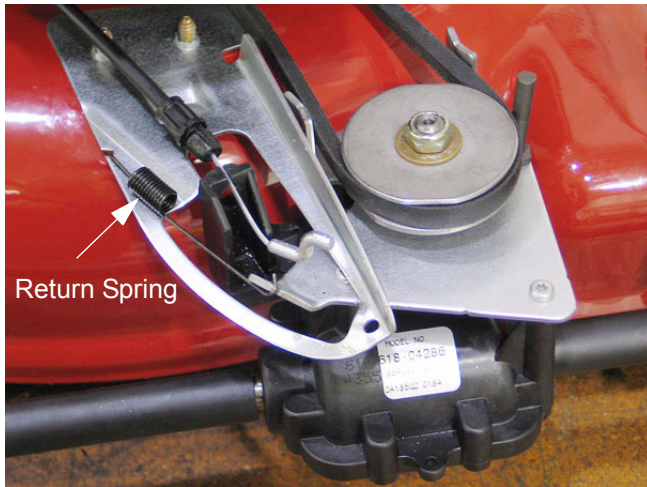


Figure 6.4

**NOTE:** Notice the orientation of the spring prior to disconnecting.

- 6.5. Remove the Wheels with a 9/16" socket.
- 6.6. Remove the snap ring that holds the drive gear in place. See Figure 6.6.

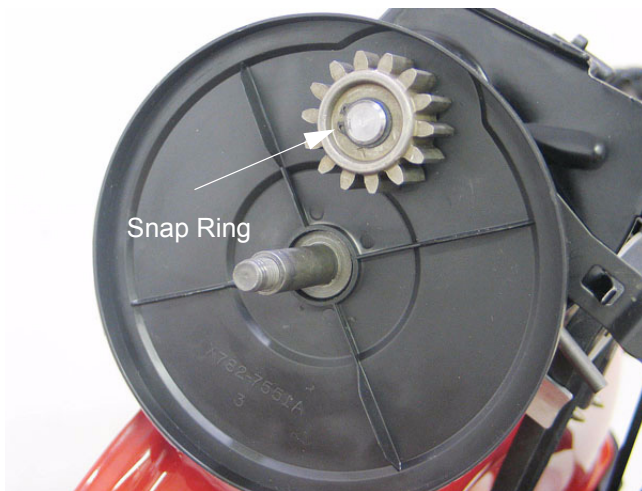


Figure 6.6

- 6.7. When removing the drive gears be careful of the dowel pins not to lose them. See Figure 6.7.

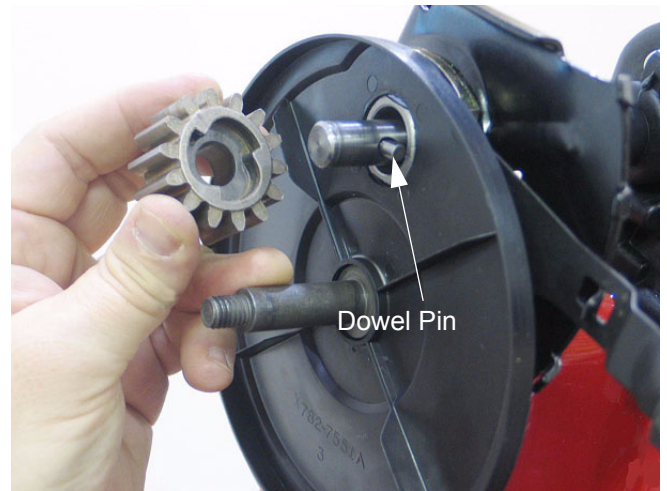


Figure 6.7

**NOTE:** The drive gears have an "R" and "L" on the outer edge for side indicators.

- 6.8. Remove the dust cover.
- 6.9. Remove left side front wheel height adjuster and loosen the bolts that hold right side front wheel height adjuster to the deck. See Figure 6.9.



Figure 6.9

**NOTE:** Tilt the left side of the transmission and twist the transmission back to remove from the right wheel bracket.

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- 6.10. Install the transmission in reverse order of disassembly. See Figure 6.10.



**Figure 6.10**

**NOTE:** Make sure the front baffle is lined up with the bolt holes for the front wheel brackets

**NOTE:** Upon installation apply a high quality axle grease to the shaft, and the inner side of the bearing sleeve.

- 6.11. Examine both sleeve spacers for damage or excessive wear. See Figure 6.11.



**Figure 6.11**

- 6.12. Assemble mower by reversing the transmission removal procedures.

## 7. REAR DISCHARGE DOOR REMOVAL/REPLACEMENT

- 7.1. Elevate the rear of mower with a couple of 4X4 blocks or similar material. See Figure 7.1.



**Figure 7.1**

- 7.2. Prior to elevating, position the rear height adjusters in third notch from the top to expose the mounting hardware. See Figure 7.2.



**Figure 7.2**



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- 7.3. Remove both wheels with a 9/16" socket. See Figure 7.3.



Figure 7.3

**NOTE:** The height adjuster lever can remain on the wheel brackets. They have been removed in this manual for visibility purposes.

- 7.4. Remove the wing nuts and hairpin clips that hold the handle on the handle brackets. See Figure 7.4.



Figure 7.4

- 7.5. Lay the handle forward out of the work area.

- 7.6. Remove the 2 socket head screws from the rear on the mower using a T-80 Torx driver. See Figure 7.6.



Figure 7.6

**NOTE:** Lift The deck slightly to free the rear baffle from the back of the deck. This will give clearance to reach the flange nuts on inner deck.

- 7.7. Remove both flange nuts and bolts that were obscured behind the rear baffle. See Figure 7.7.

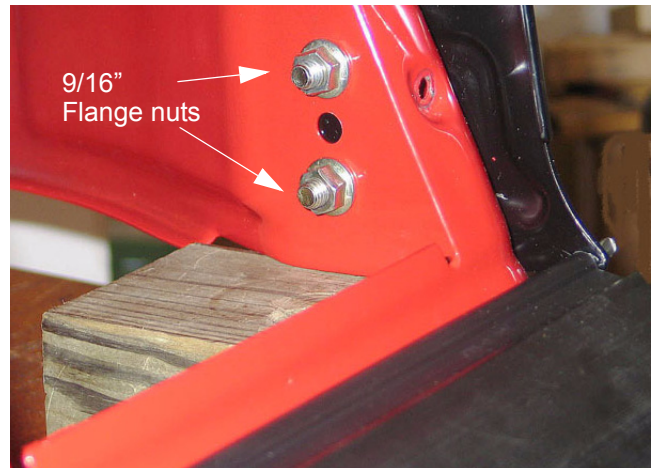


Figure 7.7





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- 7.13. When reinstalling the torsion spring, use a piece of rope or a spring puller to pull back on the spring to avoid the possibility of injury. See Figure 7.13.



Figure 7.13

- 8.2. After removing the wheel bracket you will need to take off the snap ring that holds the assembly together. See Figure 8.2.

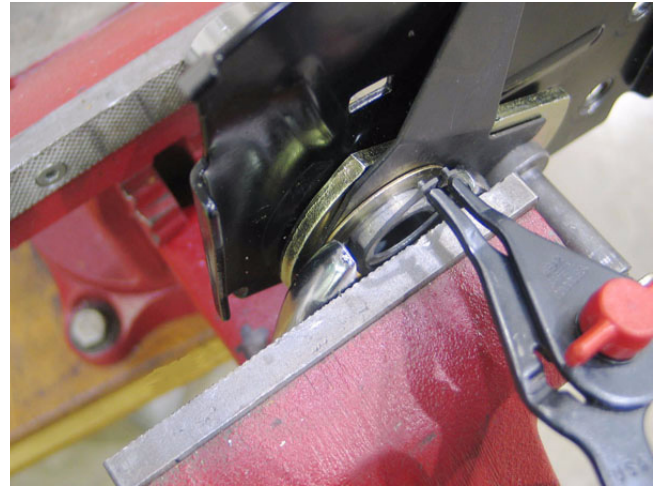


Figure 8.2

**NOTE:** The height adjustment assembly is spring loaded by a wave washer.

- 8.3. After the snap ring is removed the assembly will come apart very easily. See Figure 8.3.

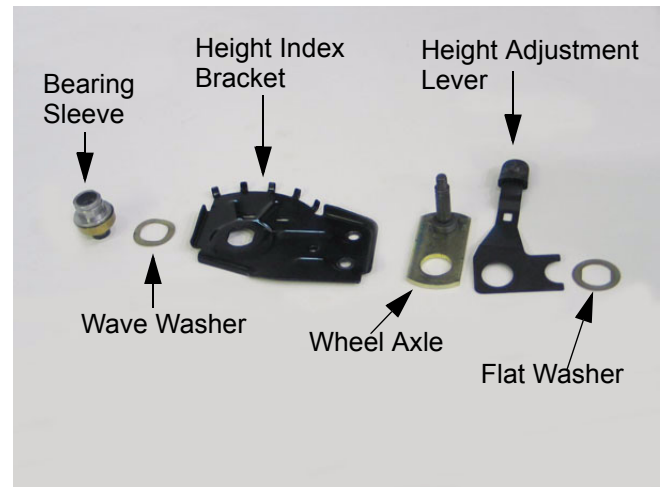


Figure 8.3

### 8. SERVICING FRONT WHEEL BRACKETS

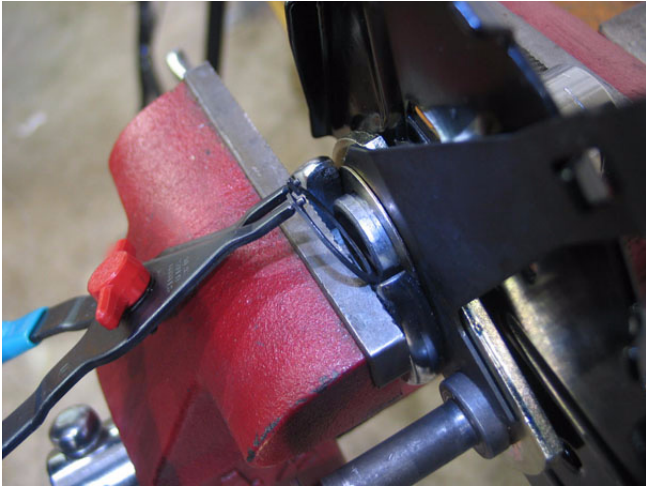
- 8.1. In some cases the front wheel brackets may need to be serviced. See Figure 8.1.



Figure 8.1

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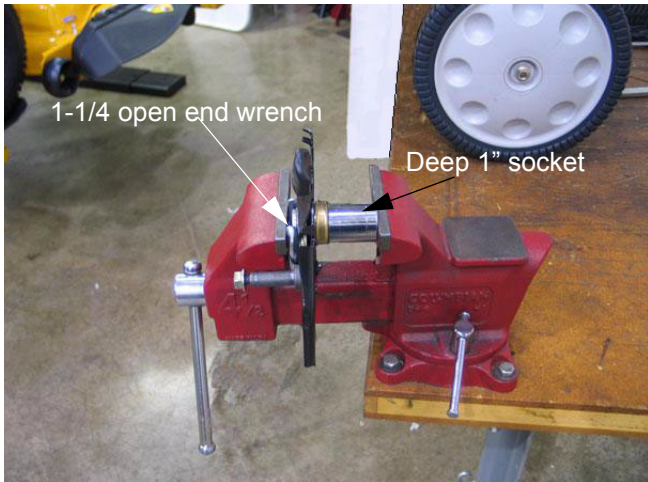
- 8.4. During reassembly it may be necessary to compress the wave washer in order to reinstall the snap ring. See Figure 8.4.



**Figure 8.4**

**NOTE:** Prior to reassembling replace the wave washer p/n 736-0447 with a new one if the original has lost tension.

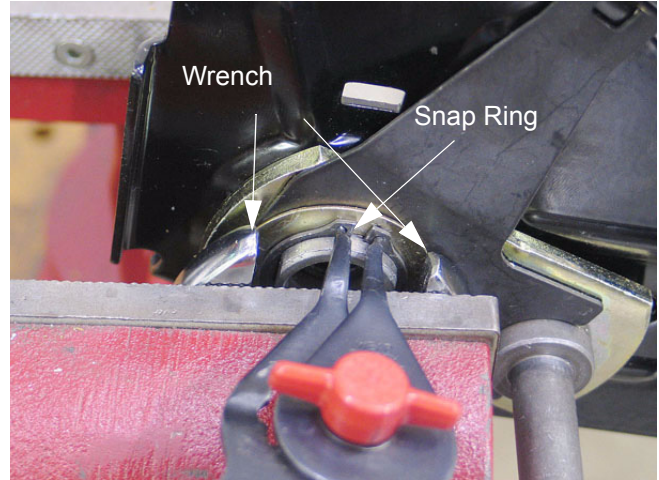
- 8.5. Use a bench top vise with a 1 1/4" open-end wrench and a deep 1" socket See Figure 8.5.



**Figure 8.5**

- 8.6. Use the Socket to press against the sleeve bearing side of the bracket. Use the wrench to press against the flat washer.

- 8.7. Center the wrench to allow enough room to put the snap ring on. See Figure 8.7.



**Figure 8.7**